



## In the United States Patent and Trademark Office

In re application of:

Chen

: Art Unit:

AN 10/772,153

: Examiner:

Filed: 02/04/2004

: Atty's Docket: SC-03-01

For: Roller Cone Bit Design Using Multi-Objective Optimization  
(confirmation no. 1857)

### **INFORMATION DISCLOSURE STATEMENT**

Honorable Commissioner of Patents and Trademarks  
Alexandria, VA 22313

Sir:

The accompanying form PTO-1449 lists one or more documents which may be considered material to the examination of this application. A copy of each document is provided, if available.

Applicant reserves the right to establish the patentability of the claimed invention over any of the listed documents should they be applied thereagainst as references, and/or to prove that some of these documents may not be prior art, may not be within an analogous field of art, and/or may not be enabling for the teachings they purport to offer.

This statement should not be construed as a representation that an exhaustive search has been made, nor that more material information does not exist.

The Examiner is specifically requested to conduct an independent and thorough review of the documents, and to form his own opinions as to the significance of those documents to patentability of the claimed inventions, regardless of any of the foregoing statements concerning the significance of the references. The foregoing statements are made in good faith, and in compliance with the duty of disclosure; but they cannot substitute for the Examiner's specialized expertise, nor are they intended to derogate from the Examiner's official duty to assess patentability.

It is also respectfully noted that the submission of this material is not intended to displace the Examiner's professional ability and duty to search. Indeed, the Examiner is specifically requested not to rely on the materials submitted herewith, but to conduct a full and independent search.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, to indicate in the file of this patent application that the documents have been considered.

Respectfully submitted,



N. Elizabeth Pham, Reg.No. 49,042

**Customer Number 29106**

Attorney for Applicant

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214-363-3038      *groover@technopatents.com*      April 6, 2004



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
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**Substitute for form 1449/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet 1 of 2

Complete if Known	
Application Number	10/772,153
Filing Date	02/04/2004
First Named Inventor	Chen
Art Unit	
Examiner Name	
Attorney Docket Number	SC-03-01

## **U. S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)			
	01	SU 1691497 A1	11-15-1991	Kurumov et al.	
	02	SU 1654515 A1	07-06-1991	Togashov et al.	
	03	SU 1768745 A1	10-15-1992	Karpukhin et al	
	04	SU 1441051 A2	11-30-1998	Karpukhin et al	
	05	EP 0384734 A1	08-29-1990	Amoco Corp.	
	06	EP 0511547 A2	04-14-1992	Crockett	

<b>Examiner Signature</b>		<b>Date Considered</b>	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>		Application Number	10/772,153
		Filing Date	02/04/2004
		First Named Inventor	Chen
		Art Unit	
		Examiner Name	
Sheet	2	of	2
		Attorney Docket Number	SC-03-01

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)			
	07	EP 0511547 A3	04-14-1992	Crockett	
	08	EP 0511547 B1	04-14-1992	Crockett	
	09	GB 2241266 A	08-28-1991	Fischer	

**Examiner Signature** \_\_\_\_\_ **Date Considered** \_\_\_\_\_

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